

ASX / TSX ANNOUNCEMENT

19 January 2018

CAUCHARI HOLE CAU15 – HIGH GRADE INTERVAL AVERAGES 475 MG/L LITHIUM

Orocobre Limited (ASX: ORE, TSX: ORL) ("Orocobre" or "the Company") is pleased to provide an update on the brine sampling of diamond drill hole CAU15 in the Cauchari JV property located in Jujuy Province, Argentina.

The exploration program is being managed by JV partner **Advantage Lithium Corp.** ("Advantage Lithium") (TSX Venture: AAL) (OTCQX: AVLIF) who hold 50% of Cauchari, earning up to 75%. Orocobre owns 33% of Advantage Lithium's issued capital.

Highlights:

- Drilling intersected extensive sandy sediments, confirming the NW Sector contains relatively high drainable porosity and permeability south from CAU07 through CAU16 to CAU15
- The brine body intersected in CAU15 extends over >132 m vertically and is expected to continue below the base of sampling at 234.5 m
- CAU15 brine averages 407 mg/l Lithium and 3,196 mg/l Potassium from 102-234.5 m depth, with a higher average grade of 475 mg/l Lithium and 3,662 mg/l Potassium from 174-234.5 m
- Average Mg/Li ratio of 3.1:1, only slightly higher than previous holes CAU07 (2.3:1), and CAU16 (2.5:1) in the NW Sector very positive for utilisation of conventional or other brine processes
- Diamond drilling ongoing on holes CAU12 and CAU13 in the south of the SE Sector, to provide increased drilling density and geological information in this area. These holes are separated by 2 km, with CAU13 located 2 km southwest of CAU09
- Preparing to drill diamond holes CAU17 and CAU18 in the NW sector for resource estimation
- Pumping tests carried out on CAU08 and CAU11 will be reported as soon as assay results are available

NW SECTOR - CAU15 Drilling Results

Drilling intersected an extensive sequence of sandy material, with coarse sandy gravel units in the last 20 m of the hole. Brine assays from 9 samples at an average sample spacing of 15 m returned an average of 407 mg/l Lithium and 3,196 mg/l Potassium over 132.5 m from a depth of 102 m to the base of sampling at 234.5 m, with the total hole depth 243.5 m. Higher grade brine in the deeper part of the hole averaged 475 mg/l Lithium and 3,662 mg/l Potassium from 174 to 234.5 m.

The brine mineralisation shows similarities to CAU16 and CAU07, where higher grade brine is present beneath brackish water and low grade brine that begins at surface. In CAU15 this low grade material extends to a depth of approximately 100 m below surface. Intersection of Li mineralised brine in CAU15 suggests brine mineralisation continues further south.

CAU15 is located approximately 6.5 km south of CAU16, for which results were released in November. The brine body defined to date extends some 12.5 km in the N-S direction between CAU07 and CAU15. Diamond core holes CAU07, CAU15 and CAU16 have all intersected relatively permeable sandy sediments that are expected to yield relatively high pumping rates from the NW Sector, which is very positive for future brine extraction.

Brine sampling was undertaken systematically at a nominal 12 m vertical interval using bailer sampling equipment, depending on the conditions encountered in the hole.

The Mg/Li ratio in all brine samples is low, averaging 3.1:1 across all the samples and 2.9:1 over the higher grade interval from 174-234.5 m. This confirms the suitability of the brine for conventional brine processing, as applied at the nearby Olaroz project.

Drill core samples from CAU15 will be sent to an experienced porosity laboratory in the United States, where they will be analysed for drainable porosity characteristics for use in the upcoming resource estimate.

NW SECTOR - CAU17 and CAU18 Drilling

Preparations are underway for drilling of diamond holes CAU17 and CAU18 in the NW Sector to supplement holes drilled in 2017 for resource estimation.

SE SECTOR - Drilling and pumping activities

CAU08 and CAU11 Pumping Test Results

Initial pumping test results are imminent for hole CAU08, located in the center of the SE Sector, and CAU11, located further to the south. Results will be provided when they become available.

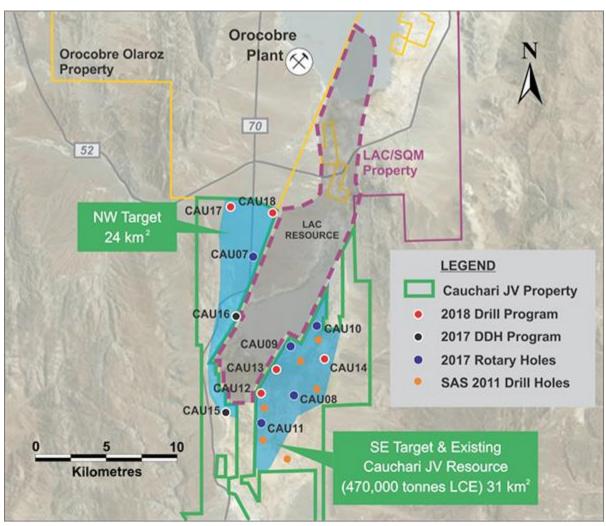
Diamond Drilling of CAU12 and CAU13

Diamond holes CAU12 and CAU13 commenced in December and drilling is continuing following the end of year shutdown period, with the holes expected to be finished around the end of January or early February. This diamond drilling will provide additional information on the distribution of sedimentary units in the SE Sector and will provide samples for laboratory analysis of porosity. Additional information will be provided as it becomes available.

Drill hole location and details

Exploration Hole Number	Sector	Total Depth (m)	Assay Interval (m)	Lithium (mg/l avg)	Potassium (mg/l avg)	Drilling Method	Kruger A	rgentine* Posgar Northing	Elevation Mean Sea Level (m)	Azimuth	Dip
CAU07	NW	275	236 m only	635	4,772	Rotary/ Diamond	3421199	7383989	3940	0	-90
CAU08	SE	400		Pending resu	ilts	Rotary	3423941	7374495	3,900	0	-90
CAU09	SE	400	60-400	662	6,137	Rotary	3423775	7377806	3,900	0	-90
CAU10	SE	429	50-340	678	6,516	Rotary	3425530	7379295	3,900	0	-90
CAU11	SE	480		Pending resu	ilts	Rotary	3421757	7372564	3,900	0	-90
CAU12	SE		Drilling par	tially comple	eted	Diamond	3421693	7374673	3,900	0	-90
CAU13	SE		Drilling par	tially comple	eted	Diamond	3422773	7376283	3,900	0	-90
CAU15	NW	243.5	102-234.5	475 within 407 interval	3,662 within 3,196 interval	Diamond	3,419,288	7,373,385	3,900	0	-90
CAU16	NW	321.5	14-298	529 within 436 interval	4,306 within 3,608 interval	Diamond	3,419,935	7,379,900	3,900	0	-90

Location of CAU15 and other Cauchari drill holes



JORC Table 1 – Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

techniques

circulation, open-hole hammer,

rotary air blast, auger, Bangka,

Criteria **JORC Code explanation** Commentary Sampling Nature and quality of sampling (eg Drill core in diamond holes was techniques cut channels, random chips, or recovered in 1.5 m length core runs in specific specialised industry polycarbonate tubes where these were standard measurement tools available. minimize sample appropriate to the minerals under disturbance. Where these tubes were investigation, such as down hole not available standard core split triple gamma sondes, or handheld XRF tubes were used, with core samples instruments, etc). These examples should not be taken as limiting the wrapped in cling-film and duct tape broad meaning of sampling. following recovery, to prevent moisture Include reference to measures taken loss from the core before storage in core to ensure sample representivity and hoxes. the appropriate calibration of any Drill core was undertaken to obtain measurement tools or systems used. representative samples of the sediments Aspects of the determination of that host brine, to evaluate the porosity mineralisation that are Material to the Public Report. permeability of these In cases where 'industry standard' sediments. work has been done this would be Brine samples were collected at discrete relatively simple (eg 'reverse depths during the diamond drilling using circulation drilling was used to bailer or a double packer or device. Use obtain 1 m samples from which 3 kg of the packer device was limited in places was pulverised to produce a 30 g by the extensive sand encountered in the charge for fire assay'). In other cases more explanation may be required, drill hole and concerns regarding over such as where there is coarse gold inflation of the packer. In these intervals that has inherent sampling a bailer device was used for purging brine problems. Unusual commodities or from the holes and for sampling. mineralisation types (eg submarine The holes are geophysically logged with nodules) may warrant disclosure of simple resistivity and SP logs, to provide detailed information. information on the lithology, in particular identifying units of halite (salt). The brine samples were collected in clean plastic bottles and filled to the top to minimize air space within the bottle. Each bottle was marked with the time and relabeled with a sample number before sending the sample to the laboratory. Rotary drill holes were used to install test production wells for pumping test evaluations and to allow sampling, to be followed by systematic sampling within screen sections of these wells. Drilling Drill type (eg core, reverse Diamond drilling with an internal (triple)

tube was used for drilling. The drilling

Criteria	JORC Code explanation	Commentary
	sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	produced cores with variable and often poor core recovery, associated with extensive unconsolidated sandy material reported in both holes. Recovery of these more friable sediments is more difficult with diamond drilling, as this material can be washed from the core barrel during drilling. • Fresh water has been used as drilling fluid for lubrication during drilling of CAU15 and CAU16, to minimize the possibility of contamination of natural formation brine with lithium-bearing fluids. Biodegradable additives are used to minimize the development of thick wall cake in the holes that could reduce the inflow of brine to the hole and affect brine quality. • Rotary drilling was undertaken to install pumping test wells, using rotary drilling with biodegradable drilling additives to minimize formation of wall cake in the holes which could reduce brine flows into the test wells.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 Diamond drill core was recovered in 1.5m length intervals in the drilling triple (polycarbonate or split) tubes. Appropriate additives were used for hole stability, to maximize core recovery. The core recoveries were measured from the cores and compared to the length of each run to calculate the recovery. Brine samples were collected at discrete depths during the drilling using a double packer over a 1 m interval (to isolate intervals of the sediments and obtain samples from airlifting brine from the sediments) or bailer device over an ~1 m interval at the base of the hole during drilling (sampling the brine inflow at the base of the hole where the drill rods were raised to allow brine inflow, following purging of the standing water – drilling fluid – in the hole). Use of the packer device was limited by the extensive sand encountered in the drill hole and

Criteria	JORC Code explanation	Commentary
		concerns regarding over inflation of the packer and by the experience of the drill crew with this equipment. The simple bailer device was used for purging brine from the holes and for sampling in these circumstances. • As the lithium brine (mineralisation) samples are taken from inflows of the brine into the hole (and not from the drill core – which has variable recovery) they are largely independent of the quality (recovery) of the core samples. However, the permeability of the lithologies where samples are taken is related to the rate and potentially lithium grade of brine inflows. • Rotary holes provided composite brine samples from pumping tests, followed by systematic sampling of screen intervals within these wells.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 Diamond holes are logged by a senior geologist who also supervised taking of samples for laboratory porosity analysis. Logging is both qualitative and quantitative in nature. The relative proportions of different lithologies which have a direct bearing on the overall porosity, contained and potentially extractable brine are noted, as are more qualitative characteristics such as the sedimentary facies and their relationships. When cores are split for sampling they are photographed. Core recoveries are measured for the entire core recovered. Rotary wells were logged by experienced geologists. However, interpretation of the sediment types is more qualitative, due to the drilling method.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, 	 Core samples are systematically sub- sampled for laboratory analysis, cutting the lower 10-15 cm of core from the core sample either in the polycarbonate tubes or (using a saw) preserving the sample in cling wrap, tape and the plastic tubing for

Criteria **JORC Code explanation** Commentary quality and appropriateness of the transportation to the laboratory. sample preparation technique. Sub-samples will be sent to the porosity Quality control procedures adopted laboratory for testing. for all sub-sampling stages to Core sampling is systematic, maximise representivity of samples. samples taken at the base of core runs Measures taken to ensure that the every 6 m to minimize any sampling bias. sampling is representative of the in This is considered to be an appropriate situ material collected, including for instance results for field sampling technique to obtain duplicate/second-half sampling. representative samples, although core Whether sample sizes are recovery is noted to be variable. appropriate to the grain size of the Duplicate core samples of sediments are material being sampled. to be prepared in the laboratory for analysis of porosity characteristics. Characteristics of porosity sub-samples are compared statistically with the sample descriptions for each sub-sample. Brine samples were collected (at irregular intervals in CAU07), due to difficulties using the packer equipment. Systematic sampling been has undertaken in CAU16, with the objective of taking brine samples every 6 m. Field duplicate samples are taken for laboratory analysis. Fluorescein tracer dye is used to distinguish drilling fluid from natural formation brine in the diamond drilling. The brine samples were collected in new unused one-litre sample bottles which were filled with brine from the bailer or the packer discharge tube. Each bottle was marked with the drill hole number and details of the sample. Prior to sending samples to the laboratory they were assigned unique sequential numbers. Quality of The Norlab/Alex Stuart laboratory in The nature, quality and assay data and appropriateness of the assaying and Jujuy, Argentina is used as the primary laboratory laboratory procedures used and laboratory to conduct the assaying of the tests whether the technique is considered brine samples collected as part of the partial or total. drilling program. They also analyzed For geophysical tools, duplicates and standards, with blind spectrometers, handheld XRF control samples in the analysis chain. The instruments, etc, the parameters used in determining the analysis laboratory is a commercially accredited including instrument make and laboratory specialized in the chemical model, reading times, calibrations analysis of brines and inorganic salts.

Criteria	JORC Code explanation	Commentary
	factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	 QA/QC check samples will be sent to another independent laboratory but these samples have not yet been dispatched to the external laboratory. The quality control and analytical procedures used at the Norlab laboratory are considered to be of high quality and the laboratory is affiliated with the Alex Stuart international group of laboratories. Duplicate and standard analyses are considered to be of acceptable quality. Down hole geophysical tools were provided by the drilling contractor and these are believed to be calibrated periodically to produce consistent results.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Accuracy, the closeness of measurements to the "true" or accepted value, was monitored by the insertion of laboratory certified standards. Duplicate samples in the analysis chain were submitted as part of the laboratory batch and results are considered acceptable. Laboratory data (from spreadsheets) is loaded directly into the project database, to be verified periodically by the independent QP.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 The holes were located with a hand held GPS in the field and will be subsequently located by a surveyor on completion of the drilling program. Coordinates provided were located with a hand held GPS. The location is in zone 3 of the Gauss Kruger coordinate system, with the Argentine POSGAR.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. 	 Lithological data was collected throughout the drilling. The 6 m vertical spacing of samples is considered sufficient to establish the degree of grade continuity. Compositing of samples has not been applied. However, in the rotary drill holes

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	Whether sample compositing has been applied.	 pumping test brine samples are composite samples from the entire length of the installed holes. More comprehensive geophysical logging of diamond holes is planned to provide higher quality data on formation porosity characteristics, in addition to laboratory porosity measurements.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 The salar deposits that host lithium- bearing brines consist of sub-horizontal beds and lenses of sand, silt, halite, clay and minor gravel, depending on the location within the salar. The vertical holes are essentially perpendicular to these units, intersecting their true thickness.
Sample security	The measures taken to ensure sample security.	 Samples were transported to the laboratory (primary, duplicate and QA/QC samples) for chemical analysis in sealed rigid plastic bottles with sample numbers clearly identified. The samples were moved from the drill site to secure storage at the camp on a daily basis. All brine sample bottles are marked with a unique label.
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	 No audits or reviews have been conducted at this point in time.

Section 2 - Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria **JORC Code explanation** Commentary Mineral Type, reference name/number, The Cauchari JV properties are located tenement and location and ownership including approximately 20 km south of the Olaroz land tenure agreements or material issues with lithium project (operated status third parties such as joint ventures, Orocobre/Sales de Jujuy) in the province partnerships, overriding royalties, of Jujuy in northern Argentina at an native title interests, historical sites, elevation of approximately 3,900 masl. wilderness or national park and The property comprises 28,000 ha in 22 environmental settings. The security of the tenure held at mineral properties in Jujuy province in the time of reporting along with any Argentina. Exploration activities are known impediments to obtaining a currently focused in the northern licence to operate in the area. properties within the larger property

Criteria	JORC Code explanation	Commentary
		 package. The properties consist of a combination of exploration properties (Cateos) and exploitation properties (minas). The tenements/properties are believed to be in good standing, with payments made to relevant government departments.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 Exploration was previously carried out in the SE Sector properties by Orocobre subsidiary SAS in 2011, with the drilling of 6 holes (5 diamond, 1 rotary), several of which were abandoned well short of the target depth due to problems with the drilling equipment. An initial resource was defined in accordance with the JORC code at the time of exploration. Immediately to the north of the Cauchari project Orocobre Limited has developed the Olaroz lithium project, which is the first new lithium brine project to produce lithium in 20 years. Significant exploration has been conducted immediately to the east and west of the JV properties by the company Lithium Americas Corp, who has defined a large resource and related reserve and who has completed a DFS on the project. This company is moving forward to project development with Industry major SQM.
Geology	Deposit type, geological setting and style of mineralisation.	 The sediments within the salar consist of halite, clay, silt, sand and gravel which have accumulated in the salar from terrestrial sedimentation and evaporation of brines within the salar. These units are interpreted to be essentially flat lying, with unconfined aquifer conditions close to surface and semi-confined to confined conditions at depth Brine within the salar is formed by solar concentration, with brine hosted within the different sedimentary units Geology was recorded during drilling of

Criteria	JORC Code explanation	Commentary
		all the holes.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	 Lithological data was collected from the holes as they were drilled and cores were retrieved. Detailed geological logging of cores has not been completed to date, and cores will be split to facilitate this. Brine samples were collected from the initial bailer and packer sampling and sent for analysis to the Norlab laboratory, together with quality control/quality assurance samples All drill holes are vertical, (dip -90, azimuth 0 degrees). CAU07 was 274.5 m deep (now being deepened) and CAU16 321.5 m, CAU15 was 243.5 m. These holes intersected lithium-bearing brine. Holes are located at approximately 3900 m above sea level.
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	Brine samples taken CAU15 were averaged (arithmetic average) without weighting across the number of samples in each hole in the lithium brine zone and in what are interpreted as different brine zones.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	 The higher grade lithium-bearing brine in CAU15 and in the NW Sector is interpreted to underlie an upper zone of less concentrated brine. The sediments hosting brine are interpreted to be essentially perpendicular to the vertical drill holes. The lengths reported for mineralisation (brine) intervals are from systematic sampling and definition of the actual

Criteria	JORC Code explanation	Commentary
		extent of the brine.The brine samples are considered to represent true widths of brine.
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	 A diagram is provided in the text of Advantage Lithium announcements showing the location of the properties and drill holes. A table is provided in this announcement shows the location of the drill holes.
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	 Representative data from drilling and sampling in the NW Sector of the Cauchari JV project is provided, such as lithological descriptions, brine concentrations and information on the thickness of mineralisation. Additional information will be provided as it comes to hand.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	 Refer to the information provided in Technical report on the Cauchari Lithium Project, Jujuy Province, Argentina, dated effective 5th December and amended 22nd December 2016 for previous geophysical and geochemical data from drilling in 2011 by the Orocobre subsidiary SAS.
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 The company is currently undertaking a drilling program, with the first six holes (CAU08, CAU09, CAU10, CAU11, CAU15, CAU16) completed in this drilling program. The program is planned to include 5 rotary and 12 diamond holes. Additional results will be provided as they come to hand.

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Competent Persons Statement

The information in this report that relates to exploration reporting at the Cauchari JV project has been prepared by Mr Murray Brooker. Murray Brooker is a geologist and hydrogeologist and is a Member of the Australian Institute of Geoscientists. Mr Brooker is an employee of Hydrominex Geoscience Pty Ltd and is independent of Orocobre. Murray has sufficient relevant experience to qualify as a competent person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. He is also a "Qualified Person" as defined in NI 43-101. Murray Brooker consents to the inclusion in this announcement of this information in the form and context in which it appears.

About Orocobre Limited

Orocobre Limited (Orocobre) is a dynamic global lithium carbonate supplier and an established producer of boron.

Orocobre is dual listed on the Australia and Toronto Stock Exchanges (ASX: ORE), (TSE: ORL). Orocobre's operations include its Olaroz Lithium Facility in Northern Argentina, Borax Argentina, an established Argentine boron minerals and refined chemicals producer and a 35% interest in Advantage Lithium.

For further information, please visit www.orocobre.com